

# Breaux Act

## COASTAL WETLANDS, PLANNING, PROTECTION AND RESTORATION ACT



Task Force Meeting

OCTOBER 13, 2004

Baton Rouge, Louisiana

**BREAUX ACT**  
**COASTAL WETLANDS PLANNING, PROTECTION AND RESTORATION ACT**  
**TASK FORCE MEETING**  
**AGENDA**

October 13, 2004 9:30 a.m.  
LA Department of Wildlife and Fisheries -- Louisiana Room  
2000 Quail Dr., Baton Rouge, La.

Documentation of Task Force and Technical Committee meetings may be found at:  
[http://www.mvn.usace.army.mil/pd/cwppra\\_mission.htm](http://www.mvn.usace.army.mil/pd/cwppra_mission.htm) or  
<http://lacoast.gov/reports/program/index.asp>

- | <b>Tab Number</b> | <b>Agenda Item</b> |
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1.     **Meeting Initiation: 9:30 a.m. to 9:40 a.m.**
    - a. Introduction of Task Force members or alternates.
    - b. Opening remarks of Task Force members.
  
  2.     **Adoption of Minutes from August 18, 2004 Task Force Meeting: 9:40 a.m. to 9:45 a.m.**
  
  3.     **Status of Breaux Act Program Funds and Projects (Browning): 9:45 a.m. to 9:55 a.m.**

Ms. Gay Browning will discuss the construction program and status of the CWPPRA accounts.
  
  4.     **Decision: FY05 Planning Budget and FY05 Public Outreach Committee Budget Approval (Saia/Wilson) 9:55 to 10:10 a.m.**
    - a) The Technical Committee recommends a FY05 Planning Budget for the upcoming fiscal year in the amount of \$4,738,129.
  
    - b) The CWPPRA Public Outreach Committee will present the FY05 Public Outreach Committee Budget to the Task Force and request approval of \$437,900 for the 2005 Outreach Committee Budget.
  
  5.     **Decision: Recommendation to Restrict Phase II Budget Requests for Projects Already Approved for Phase II But Not Yet Under Construction to a Cap of 100% (Including Contingency) (Saia) 10:10 a.m. to 10:20 a.m.** Due to the limited available CWPPRA funds for ongoing approved Phase I and II CWPPRA projects, it is recommended that the 125% cap be lowered to 100% to avoid developing a negative "un-programmed" balance in the CWPPRA program budget and to allow the Corps of Engineers to better estimate available funds in the program. The Technical Committee recommends the Task Force restrict Phase II budget requests for projects already approved for Phase II but not yet under construction to a cap of 100%.
  
  6.     **Decision/Discussion:**
    - a) **Discussion and Decision Regarding Future Operation and Maintenance (O&M) Funding for Non-Cash Flow Projects that have Depleted Their 20-Year O&M Budget (Rowan) 10:20 a.m. to 10:30 a.m.**



Option 1: Consider requests of remaining 20-year O&M funding on a non-cash flow basis for individual projects, as funds are needed

Option 2: Consider requests of 3-year incremental funding of O&M funding on a cash flow basis for individual projects, as funds are needed.

- b) **Consider Requests for Operation and Maintenance (O&M) Funding Increases on Priority Project Lists (PPL) 1-8 (Saia) 10:30 a.m. to 10:40 a.m.** The Task Force will consider the request for O&M cost increases for projects on PPL's 1-8, in the amount of \$935,000. The Technical Committee recommends to the Task Force an increase of \$935,000 in O&M funding.

- 7. **Decision: Request for Funding for Administrative Costs for those Projects Beyond Increment 1 Funding (Saia) 10:40 a.m. to 10:45 a.m. (Saia)** The U.S. Army Corps of Engineers is requesting \$21,915 funding approval for administrative costs for those projects beyond Increment 1 funding. The Technical Committee recommends to the Task Force approval of \$21,915 for funding for administrative costs.

- 8. **Decision: Request for FY08 Coastwide Reference Monitoring System (CRMS)-Wetlands Monitoring Funds and Project Specific Monitoring Funds for Projects on PPLs 9-13 (Saia) 10:45 a.m. to 10:55 a.m.** Following a presentation on the status/progress of CRMS over the past year by Mr. Rick Raynie, the following requests will be discussed by the Task Force:

- a) project specific monitoring funding beyond the first 3-years for projects on PPL's 9-11 (in order to maintain a 3-year rolling amount of funding) in the amount of \$91,563.
- b) CRMS FY08 monitoring request in the amount of \$532,000.

The Technical Committee recommends to the Task Force approval of \$91,563 for project specific monitoring and \$532,000 for FY08 CRMS.

- 9. **Decision: Request for Re-allocation of Funds for Construction Unit 4 for the Barataria Basin Landbridge Shoreline Protection, Phases 1 and 2 (BA-27) (Saia) 10:55 a.m. to 11:10 a.m.** BA-27 is a non-cash flow project. The Natural Resources Conservation Service and the LA Department of Natural Resources are seeking a re-allocation of \$1,510,563 of the existing remaining BA-27 budget to the BA-27 portion of Construction Unit 4. This amount is an increase above 125% of the approved amount for the BA-27 portion of Construction Unit 4. The Technical Committee recommends to the Task Force approval to re-allocate \$1,510,563 for BA-27.

- 10. **Decision: Request for Construction Approval and Phase II Authorization for Projects on all PPL's (Saia) 11:10 a.m. to Noon and 1:30 p.m. to 4:10 p.m.** The Task Force will consider requests for construction approval and Phase II approval for projects on all PPL's. The Technical Committee reviewed and took public comment on September 9, 2004 on the twelve projects shown in the table, and recommends approval of four projects and one demonstration project to the Task Force within available FY05 funding (see table). With approval of these five projects, it is estimated that approximately \$24.6 million in Federal funding may still be available for additional funding approvals for FY05. The Task Force will consider the Technical Committee's recommendation and make a final decision on construction authorization or funding approval for FY05.

The projects in the table below will be individually discussed by the sponsoring agency, the Task Force and the general public as shown below:

- a) Agency presentation on individual projects
- b) Task Force questions and comments on individual projects
- c) Public comments on individual projects (Comments are requested to be limited to 3 minutes)

Recommended Approval by Technical Committee	Agency	Proj No.	PPL	Project	Constr Start	Phase II, Incr 1 Funding Request	Phase II Total Cost	Acres over 20 years	Prioritization Scores	Prioritization "Rank"	30% Design Review Meeting Date	95% Design Review Meeting Date
<b>X</b>	NRCS	BA-27	8	Barataria Basin Landbridge, Ph 1&2 - CU 5*	Jun-05	\$7,441,870	\$7,441,870	721	77.25	1	20 Aug 03 (A)	2 Sept 04(A)
	NRCS	BA-27c	9	Barataria Basin Landbridge, Ph 3 - CU 5	Jun-05	\$12,069,203	\$14,074,159	180	45.55	8	20 Aug 03 (A)	2 Sep 04 (A)
	COE	TV-11b	9	Freshwater Bayou Bank Stabilization - Belle Isle Bayou to Lock	Jan-05	\$13,827,382	\$15,697,763	241	42.50	10	27 Jun 02 (A)	22 Jan 04 (A)
<b>X</b>	FWS	ME-16	9	Freshwater Introduction South of Hwy 82	Jun-05	\$4,323,846	\$5,444,187	296	57.35	6	14 May 03 (A)	11 Aug 04 (A)
	NRCS	TE-39	9	South Lake DeCade - CU 1	Jun-05	\$2,511,857	\$3,431,285	207	73.45	2	19 Jul 04 (A)	2 Sep 04 (A)
	NRCS	TE-43	10	GIWW Bank Rest of Critical Areas in Terre	Jun-05	\$20,434,224	\$23,641,525	366	43.25	9	14 May 03 (A)	26 Aug 04 (A)
	FWS	TE-44(2)	10	North Lake Mechant - CU 2	Feb-05	\$27,400,960	\$29,344,846	553	53.10	7	7 May 03 (A)	12 Aug 04 (A)
	FWS	BA-36	11	Dedicated Dredging on Barataria Basin LB	Jun-06	\$33,730,712	\$33,855,606	605	61.00	5	17 Dec 03 (A)	29 Jul 04 (A)
	COE	ME-21	11	Grand Lake Shoreline Protection	Jan-05	\$12,404,517	\$14,155,779	540	66.25	4	14 May 04 (A)	16 Aug 04 (A)
<b>X</b>	NRCS	TE-48	11	Raccoon Island Shoreline Protection, Ph A (CU1)	Jun-05	\$6,451,765	\$6,781,037	16	42.00	11	19 Jul 04 (A)	2 Sep 04 (A)
<b>X</b>	COE	ME-22	12	South White Lake	Jan-05	\$14,122,834	\$18,085,844	844	66.40	3	30 Jun 04 (A)	3 Sep 04 (A)
<b>X</b>	COE	LA-06	13	Shoreline Protection Foundation Improvements Demo **	Jan-05	NA	NA	NA	NA	NA	NA	NA

TOTAL: \$154,719,170 \$171,953,901

\* An increase of \$7,441,870 is needed for this non-cash flow project. Total Phase II cost is \$10,035,500.

\*\* The sponsors are seeking construction approval for this demo, which will be constructed in conjunction with South White Lake SP Project

11. **Announcement: PPL 14 Public Meetings (LeBlanc) 4:10 p.m. to 4:15 p.m.** Public meetings will be held in November to present the results of the PPL14 candidate project evaluations. The meetings are scheduled as follows:

November 17, 2004 7:00 p.m. Vermilion Parish Police Jury Courthouse Bldg, Abbeville, LA

November 18, 2004 7:00 p.m. U.S. Army Corps of Engineers (DARM - A) New Orleans, LA

12. **Due to the length of the meeting the Task Force deferred Item 12 until next Task Force meeting.**  
**Report: Public Outreach Committee Annual Report (Bodin) 4:15 p.m. to 4:30 p.m.** Ms. Bodin will present the Public Outreach Committee's Annual Report.
13. **Due to the length of the meeting the Task Force deferred Item 13 until next Task Force meeting. It was requested that relevant documents for this item be sent by email to the Task Force and Technical Committee as soon as possible.**

**Report: Preliminary Damage Assessment from Hurricane Ivan (Broussard/Burkholder)**  
**4:30 p.m. to 4:40 p.m.**

14. **Additional Agenda Items 4:40 p.m. to 4:45 p.m.**
15. **Request for Public Comments 4:45 p.m. to 4:50 p.m.**
16. **Announcement: Date and Location of the Next Task Force Meeting (LeBlanc) 4:45 p.m. to 4:50 p.m.** The next meeting of the Task Force is scheduled for 9:30 a.m., January 26, 2005 in New Orleans, Louisiana.
17. **Proposed Dates of Future Program Meetings (LeBlanc) 4:50 p.m. to 4:55 p.m.** Several schedules changes are proposed for the CWPPRA program in 2005 to better accommodate the 2006 funding approval process. Changes are indicated below from the previously announced schedule.

*\* Schedule or location changes*

December 16, 2004	9:30 a.m.	Technical Committee	New Orleans
January 26, 2005	9:30 a.m.	Task Force	New Orleans
March 16, 2005	9:30 a.m.	Technical Committee	New Orleans
April 13, 2005	9:30 a.m.	Task Force	Lafayette
<b>*June 15, 2005</b>	9:30 a.m.	Technical Committee	Baton Rouge
<b>*July 13, 2005</b>	9:30 a.m.	Task Force	New Orleans
August 30, 2005	7:00 p.m.	PPL 15 Public Meeting	Abbeville
August 31, 2005	7:00 p.m.	PPL 15 Public Meeting	New Orleans
<b>*September 14, 2005</b>	9:30 a.m.	Technical Committee	<b><i>New Orleans</i></b>
<b>*October 19, 2005</b>	9:30 a.m.	Task Force	<b><i>New Orleans</i></b>
<b>*December 7, 2005</b>	9:30 a.m.	Technical Committee	<b><i>Baton Rouge</i></b>
<b>*January 25, 2006</b>	9:30 a.m.	Task Force	<b><i>Baton Rouge</i></b>

Proposed New Schedule

March 15, 2006	9:30 a.m.	Technical Committee	New Orleans
April 12, 2006	9:30 a.m.	Task Force	Lafayette
June 14, 2006	9:30 a.m.	Technical Committee	Baton Rouge
July 12, 2006	9:30 a.m.	Task Force	New Orleans
August 30, 2006	7:00 p.m.	PPL 16 Public Meeting	Abbeville
August 31, 2006	7:00 p.m.	PPL 16 Public Meeting	New Orleans
September 13, 2006	9:30 a.m.	Technical Committee	New Orleans
October 18, 2006	9:30 a.m.	Task Force	New Orleans
December 6, 2006	9:30 a.m.	Technical Committee	Baton Rouge
January 31, 2007	9:30 a.m.	Task Force	Baton Rouge

**Adjourn**



Natural Resources Conservation Service  
646 Cajundome Blvd., Suite 180  
Lafayette, Louisiana 70506

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September 8, 2004

Ms. Julie LeBlanc, Chairman  
CWPPRA Planning and Evaluation Subcommittee  
U.S. Army Corps of Engineers  
Planning, Programs, and Project Management Division  
P.O. Box 60267  
New Orleans, LA 70160-0267

Dear Ms. LeBlanc:

RE: TE-39 South Lake Decade Freshwater Introduction – Construction Unit 1  
“Cash-Flow” Phase Two Authorization Request

Pursuant to Revision 9.0 of the CWPPRA Standard Operating Procedures (Section 6.j. and Appendix C), please find enclosed the Phase Two Authorization Request package. This request is for the construction of Construction Unit 1 (CU #1) of the South Lake Decade Freshwater Introduction Project (TE-39). This project was authorized in January 2000 by the Louisiana Coastal Wetlands Conservation Task Force under the authority of the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA).

If you or any members of the Planning and Evaluation Subcommittee, Technical Committee or Task Force have any questions regarding this matter, please call me at (318) 473-7756.

Sincerely,

A handwritten signature in dark ink, appearing to read "W. Britt Paul", is written over a light blue horizontal line.

W. Britt Paul  
Assistant State Conservationist  
for Water Resources and Rural Development

Enclosures

cc: John Saia, Technical Committee Chair, USACE, New Orleans, Louisiana  
Darryl Clark, Technical Committee Member, USFWS, Lafayette, Louisiana  
Rick Hartman, Technical Committee Member, NMFS, Baton Rouge, Louisiana  
Sharon Parrish, Technical Committee Member, EPA, Dallas, Texas  
Phil Pittman, P&E Subcommittee Member, LDNR/CRD, Baton Rouge, Louisiana  
Martha Segura, P&E Subcommittee Member, USFWS, Lafayette, Louisiana  
Rachel Sweeney, P&E Subcommittee Member, NMFS, Baton Rouge, Louisiana  
Wes McQuiddy, P&E Subcommittee Member, EPA, Dallas, Texas  
John Jurgensen, P&E Subcommittee Member, NRCS, Alexandria, Louisiana  
Ismail Merhi, Project Manager, LDNR, Baton Rouge, Louisiana  
Loland Broussard, Project Manager, NRCS, Lafayette, Louisiana  
Ronnie Faulkner, Design Engineer, NRCS, Alexandria, Louisiana

Randolph Joseph, Jr., Area Conservationist, NRCS, Lafayette, Louisiana  
Michael Trusclair, District Conservationist, NRCS, Thibodaux, Louisiana  
Chris Knotts, Administrator Coastal Engineering Activities, LDNR, Baton Rouge, Louisiana  
Kirk Rhinehart, Administrator Coastal Restoration Activities, LDNR, Baton Rouge, Louisiana  
Gerry Duszynski, Assistant Secretary, LDNR/OCRM, Baton Rouge, Louisiana  
Cynthia Duet, Governor's Office of Coastal Activities, Baton Rouge, Louisiana

## Phase II Authorization Request

### South Lake Decade Freshwater Introduction Project (TE-39) Construction Unit 1

#### Description of Phase I Project

The South Lake Decade Freshwater Introduction Project (TE-39) was approved for Phase 1 funding by the CWPPRA Task Force on the 9<sup>th</sup> Priority Project List. This project is located in Terrebonne Parish, Louisiana, within the Terrebonne Hydrologic Basin, approximately ten miles southeast of the community of Theriot. The project is bordered on the north by the southern bank of Lake Decade and Small Bayou LaPointe ridge, to the east and southeast by an unnamed oilfield location canal, on the south and southwest by undifferentiated marsh, and to the west by an unnamed north - south oilfield canal and Bayou Decade. The purpose of the project is to reduce current interior marsh loss rates and increase the occurrence and abundance of submerged aquatic vegetation (SAV).

The proposed project, as selected for Phase I authorization, featured the construction of 5,200 linear feet of shoreline protection along the southern bank of Lake Decade, the installation of a freshwater introduction structure in the southern bank of Lake Decade, and removal of an existing weir in Lapeyrouse Canal. The Wetland Value Assessment (WVA) benefits attributed to these features were a net increase of 201 acres by the end of the 20 year project life.

The total project budget at the time of Phase 1 approval is as follows:

<b>Budget Item</b>	<b>Phase 1 Costs</b>	<b>Phase II Costs</b>
Engineering & Design	217,296	
Land Rights	51,008	
Federal S&A	37,244	37,243
LDNR S&A	18,622	18,622
Corps Project Management	1,947	19,179
Supervision & Inspection		53,354
Contingency		384,686
Construction		1,538,742
Monitoring	71,346	740,757
O&M		778,531
<b>Total</b>	<b>397,463</b>	<b>3,571,115</b>

Total Fully Funded Cost **\$ 3,968,577**

Total Fully Funded Cost (125%) **\$ 4,960,721**

During the Phase I planning process, NRCS conducted several field trips with an interdisciplinary team of technical specialists to survey, evaluate, and collect data on vegetative marsh types, emergent/submergent vegetative communities and predominance of each, wildlife usage and habitat conditions, hydrologic conditions, and other physical and biological parameters. As a result of this planning effort, the revision of and addition to initial project features were identified (refer to Figure 1). The current proposed features for the TE-39 Project are as follows:

- (A) 3 Multi-gated Diversion Structures on south perimeter of Lake Decade;
- (B) Approximately 8,700 ft. of rock revetment along south shoreline of Lake Decade;
- (C) Enlargement of Lapeyrouse Canal from Lake Decade southward to interior open water areas;
- (D) Approximately 2,900 ft. of oilfield canal embankment restoration;
- (E) Installation of 2 low-level rock weirs;
- (F) Installation of 1 armored plug closure;
- (G) Vegetative protection.

### **Overview of Phase I Tasks, Process and Issues**

It was proposed by NRCS and approved by the Engineering & Environmental Workgroups and Technical Committee (26 Mar 2003) to separate the TE-39 Project into two “independent” construction units. The purpose was to accelerate the E&D timetable on those project components requiring less planning and design effort. Construction Unit No. 1 (CU #1) involves the shoreline protection/hydrologic restoration components of the project and Construction Unit No. 2 (CU #2) will encompass the freshwater introduction features.

To-date the following tasks have been completed for the Phase 1 portion of this project:

- 1) Plan of Work
- 2) Cost Share Agreement between NRCS and DNR
- 3) Cultural Resources & Oyster Investigations & Assessment
- 4) Landrights Work Plan
- 5) Prioritization Evaluation
- 6) Plan/Environmental Assessment & FONSI
- 7) Section 303(e) Approval
- 8) NRCS Overgrazing Determination
- 9) Draft Ecological Review
- 10) Design Surveys – NRCS
- 11) Geotechnical Investigation, Analysis, & Report
- 12) 30% Design Review
- 13) Draft Construction Plans & Specifications
- 14) Current Construction Cost Estimate
- 15) 95% Design Review
- 16) Permit Applications



## Engineering and Design Tasks

Design surveys were completed by NRCS Construction Survey Crews and are included in the 95% Design Report posted on LDNR's ftp server at the following link:

<ftp://ftp.dnr.state.la.us/pub/CED%20Project%20Management/NRCS>

The surveys were completed using Ashtech Z-Extreme Dual Frequency Receivers operating in RTK (Real-Time Kinematic) mode. The survey occupied DNR benchmark "TE-39-SM-A" for control. Design survey cross sections were taken at approximately 200' intervals along the proposed earthen embankment and at 250' intervals along the lake rim of the project area. From the survey data, an alignment was developed for the revetment and embankment. The survey cross sections, survey profiles, and proposed alignment were used for calculating quantities.

Initial pipeline investigations have been initiated with known pipeline companies as shown on the design drawings. A magnetometer survey will be performed prior to final design. Refer to the Design Drawings and LDNR Landrights Memo in the 95% Design Report for established pipeline information.

Geotechnical investigation and analyses have been performed. The geotechnical reports are included in the 95% Design Report. The initial geotechnical report (August 2001) prepared by Soil Testing Engineers, Inc. (STE) contains all boring and soils analysis along with predicted settlement and stability for the proposed project features. A supplemental report (May 2004) was provided by Burns Cooley Dennis, Inc. (BCD) with respect to additional settlement and stability analysis on a rock/lightweight aggregate weir section for the proposed fixed crested weir and rock revetment on the earthen embankment.

Evaluation of the two reports cited above resulted in a design decision to utilize the proposed armored earthen embankment to configure the geometry of a proposed weir section with a solid rock over flow section. A consideration given in the selection of the proposed weir design was that the structure could be easily modified in the event an O&M contingency plan must be implemented. The plan would be put in effect if the monitoring of interior wetland conditions showed progressive land loss and deterioration due to increased water levels.

The shoreline protection feature for the south bank of Lake Decade was changed to a foreshore dike during phase 1 planning and was analyzed in the STE report. However, after conducting additional site visits to the project area, an observation was made that the foundation area of the existing earthen embankment is pre-consolidated from the many years of direct loading applied by the embankment. Therefore, a revetment of the existing embankment was chosen as the preferred approach for shoreline protection.

Hydrologic and hydraulic calculations were performed by NRCS to insure that the proposed embankment restoration and weir project features would not adversely affect the marsh interior within construction unit number 1 (CU #1). A conservative approach was taken in the calculations. Only existing significant hydraulic conveyance openings within the system were used to compute discharge. The discharge area of the proposed weir was neglected. The calculations confirm that the existing additional openings along the perimeter of the marsh interior would adequately convey selected storm event capacities. Conversely, it was also determined that the discharge capacity of the weir alone is sufficient to provide adequate drainage for the identified watershed.

30% Design Review Meetings were held on September 17, 2003, and July 19, 2004. NRCS received a letter from LDNR, dated August 2, 2004, stating they concur with proceeding with the



design of the project to the 95% design level. A 95% Design Review Meeting was held on September 2, 2004. No outstanding engineering issues were identified and minor comments were made regarding supporting data included in the 95% Design Report.

### Supplemental Tasks

Preliminary landrights have been executed with all landowners (2). Both landowners have acknowledged their intent to sign necessary documents once the project has obtained Phase II Task Force approval. Landrights with affected utilities and pipelines are proceeding without interruption and are expected to be finalized in the near future. LDNR has determined that no oyster seed grounds or leases will be affected by project implementation.

A review of the Louisiana Department of Culture, Recreation & Tourism, Office of Cultural Development files indicated that two (2) cultural resource sites are located within the boundaries of the TE-39 Project. Both of the sites are described as shell middens experiencing deterioration due to many of the same impacts causing marsh loss (i.e. wave wash, scouring, subsidence, and physical disturbance from canal dredging). A letter, dated May 24, 2001, was received from the Louisiana Department of Culture, Recreation & Tourism stating that, due to the nature of this project the sites will not be affected, therefore they have no objections to its implementation.

Comments relative to other significant task items are addressed in the attached "Checklist of Phase Two Requirements".

### Construction Unit No. 1 Project Issues

At the September 17, 2004, 30% Design Review Meeting, concerns were raised and post-meeting comments were received regarding the negative hydrologic impact the proposed embankment restoration and low level weir may have on affected wetlands (i.e. increased water levels). NRCS conducted an engineering survey of the CU #1 area which identified existing perimeter boundary conditions and normal marsh elevations within the interior. An onsite field trip was held on October 22, 2003, with various agency personnel to visually survey the perimeter and interior conditions of the area. NRCS conducted hydrologic and hydraulic mathematical modeling assessments on the proposed project features in question based on collected survey data. Results of these assessments indicated that discharge removal rates of the CU #1 area, with the proposed features in place, would not cause impoundment conditions that would in turn negatively impact emergent wetland vegetation.

A second 30% Design Review Meeting was held on July 19, 2004. DNR and attending federal agencies acknowledged their acceptance of NRCS's modeling assessments. Agency comments and NRCS responses, as a result of the 30% meeting are included in the 95% Design Report posted on LDNR's ftp server.

The 95% Design Review meeting for this candidate project was held on September 2, 2004. At this meeting, reviewing agencies had the opportunity to provide comments regarding the 95% Design Report and supporting documents that were posted on DNR's ftp server on August 19, 2004, at the following link:

<ftp://ftp.dnr.state.la.us/pub/CED%20Project%20Management/NRCS>

## **Checklist of Phase II Requirements**

### **South Lake Decade Freshwater Introduction (TE-39) CU# 1**

#### **A. List of Project Goals and Strategies.**

The goals of this project are to reduce interior marsh loss rates and increase the occurrence and abundance of submerged aquatic vegetation (SAV). The strategy proposed to accomplish these goals are the construction of a rock revetment along the south shoreline of Lake Decade, a rock riprap fixed crested weir, and the rehabilitation and armoring of an earthen embankment.

#### **B. A statement that the Cost Sharing Agreement between the Lead Agency and Local Sponsor has been Executed for Phase I.**

A Cost Sharing Agreement has been executed between NRCS (NRCS Agreement No. CWPPRA-00-01) and DNR (DNR Agreement No. 2511-01-02), dated July 25, 2000.

#### **C. Notification from the State or the Corps that landrights will be finalized in a short period of time after Phase II approval.**

LDNR is preparing a letter to the Chairman of the Planning and Evaluation Subcommittee that will report that substantial progress had been made regarding landrights acquisition, that no significant landrights acquisition problems are anticipated, and that DNR is confident that landrights will be finalized in a reasonable period of time after Phase Two Approval.

#### **D. A favorable Preliminary Design Review (30% Design Level).**

A 30% Design Review meeting was held on September 17, 2003. Issues were raised by DNR and some federal agencies concerning the hydrologic impact that proposed project measures may have on interior wetlands. NRCS addressed these issues by conducting hydrologic and hydrologic mathematical modeling assessments which concluded no negative impacts are anticipated as a result of project construction. A second 30% Design Review Meeting was held on July 19, 2004, in which DNR and participating agencies concurred with NRCS's assessments. Concurrence to proceed with project designs to the 95% level was received by DNR in a letter dated August 2, 2004. All written comments received from the 30% Design Review are addressed in the 95% Design Review Package posted on DNR's ftp server.

#### **E. Final Project Design Review (95% Design Level).**

A 95% Design Review Meeting was held on September 2, 2004. No substantial outstanding issues were identified and minor comments were made regarding supporting data to the Final Design Report. NRCS requested that official comments, if deemed necessary, from participating agencies on the 95% Design Report and review meeting be submitted within a two (2) week time period.

**F. A draft of the Environmental Assessment of the Project, as required under the National Environmental Policy Act must be submitted thirty days before the request for Phase II approval.**

A Final Environmental Assessment of the TE-39 Project was released for public review on June 2001. The Final EA was developed after comments were received and incorporated on a draft Environmental Assessment which was submitted for interagency review in April 2001. Project features have not significantly changed since the release of the Final EA.

**G. A written summary of the findings of the Ecological Review.**

The draft Ecological Review, submitted August 2004, stated that the “proposed strategies of the South Lake Decade Freshwater Introduction - CU 1 Project will likely achieve the desired ecological goals.” A Final Ecological Review shall be completed by DNR after the 95% Design Review phase.

**H. Application for and/or issuance of the public notices for permits.**

A draft 404 & CUP application was prepared for submittal in September 2003. However, due to concerns raised regarding certain project features proposed at the initial 30% Design Review Meeting, a decision was made to postpone submitting a final application package till after the 95% Design Review Meeting. A formal 404 Permit Application is anticipated to be submitted by the landowners (permittee) in early September.

**I. A hazardous, toxic and radiological waste (HTRW) assessment, if required, has been prepared.**

NRCS has determined that an HTRW assessment is not required.

**J. Section 303(e) approval from the Corps.**

Section 303e approval was granted by the Corps Real Estate Division on August 4, 2004.

**K. Overgrazing determination from the NRCS (if necessary).**

NRCS has determined that overgrazing is not a problem within the project area, nor is there future potential for such problem.

**L. Revised cost estimate of Phase II activities, based on the revised Project design.**

1) The specific Phase 2 funding request (updated construction estimate, three years of monitoring, and O&M) is \$2,511,857.

2) The current estimated fully funded cost for TE-39 CU #1 is \$3,923,000. This cost was provided by Allan Hebert, EcoWG, on August 27, 2004. The revised budget sheets, with the anticipated schedule of expenditures, are provided as an attachment.

**M. Estimate of projects expenditure by state fiscal year subdivide by funding category.**

<b>Budget Category</b>	<b>Amount</b>
Accrued costs to June 30, 2004	
Federal E&D	\$304,337.17
LDNR E&D and Lands	\$62,290.38
Total Expenditure up to FY04	\$366,627.55

**N. A revised Wetland Value Assessment must be prepared if, during the review of the preliminary NEPA documentation, three of the Task Force agencies determine that a significant change in project scope occurred.**

A Wetland Value Assessment was specifically prepared for the CU #1 portion of the TE-39 South Lake Decade Project on March 20, 2003. A revised WVA was not necessary at the 30% or 95% level of review because no changes were made in project features that would have resulted in a change in projected project benefits.

**O. A breakdown of the Prioritization Criteria ranking score, finalized and agreed upon by all agencies during the 95% review.**

A revised Prioritization Fact Sheet was submitted to CWPPRA agencies for review on August 28, 2004, with comments due on or before the 95% Design Review Meeting

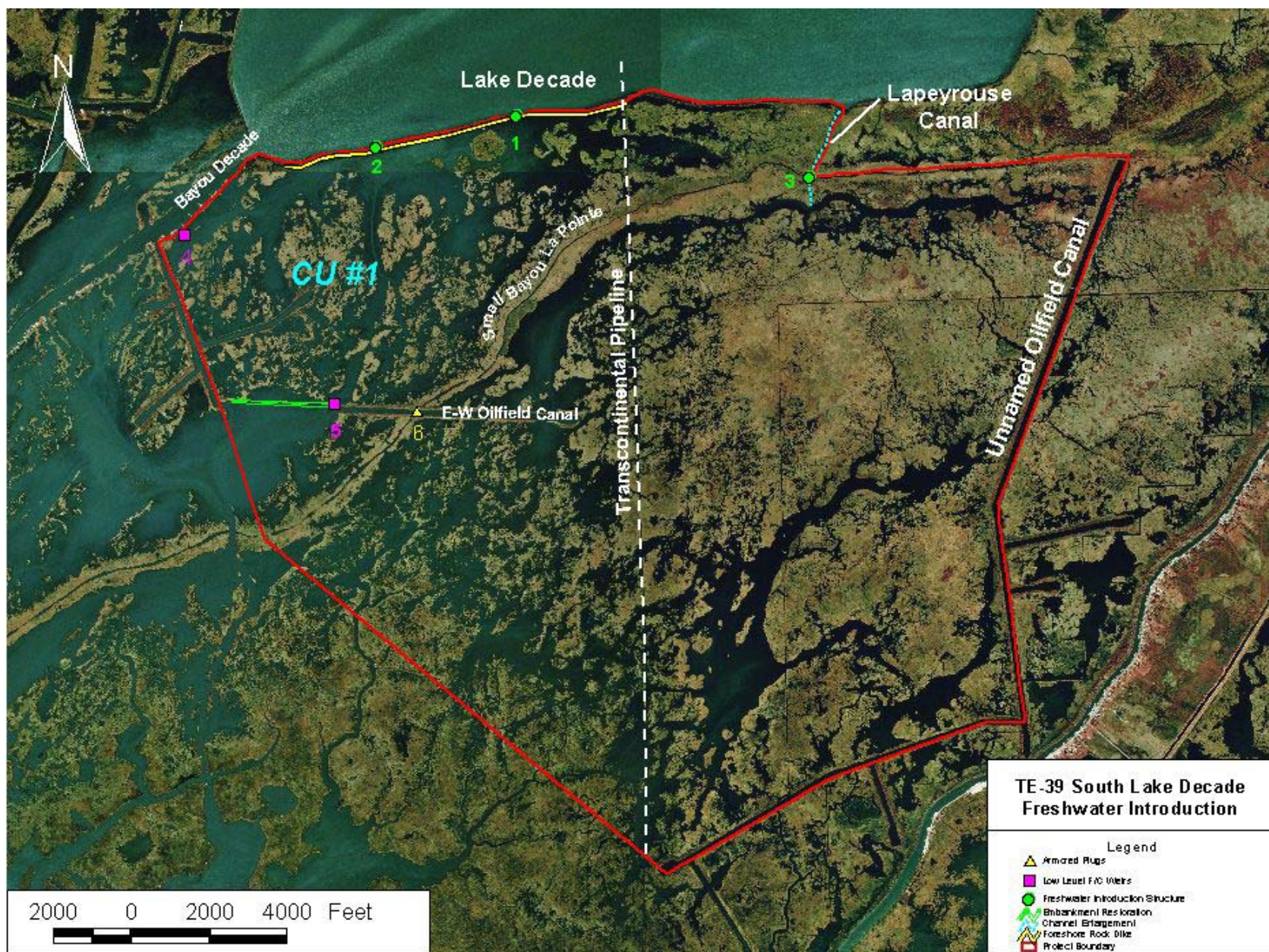
scheduled for September 2, 2004. Based on comments received, no corrections to the submitted fact sheet were recommended, therefore the Prioritization Fact Sheet dated 28 August 2004 will be considered final.

Listed below are current prioritization criterion and associated scores for the TE-39 CU #1 Project:

<b>Criteria</b>	<b>Score</b>	<b>Weight</b>	<b>Final Score</b>
Cost Effectiveness	10	2	20
Area of Need	9.3	1.5	13.95
Implementability	10	1.5	15
Certainty of Benefits	6.5	1	6.5
Sustainability of Benefits	8	1	8
HGM – Riverine Input	0	1	0
HGM – Sediment Input	0	1	0
HGM – Landscape Features	10	1	10
<b>Total Score</b>			<b>73.45</b>

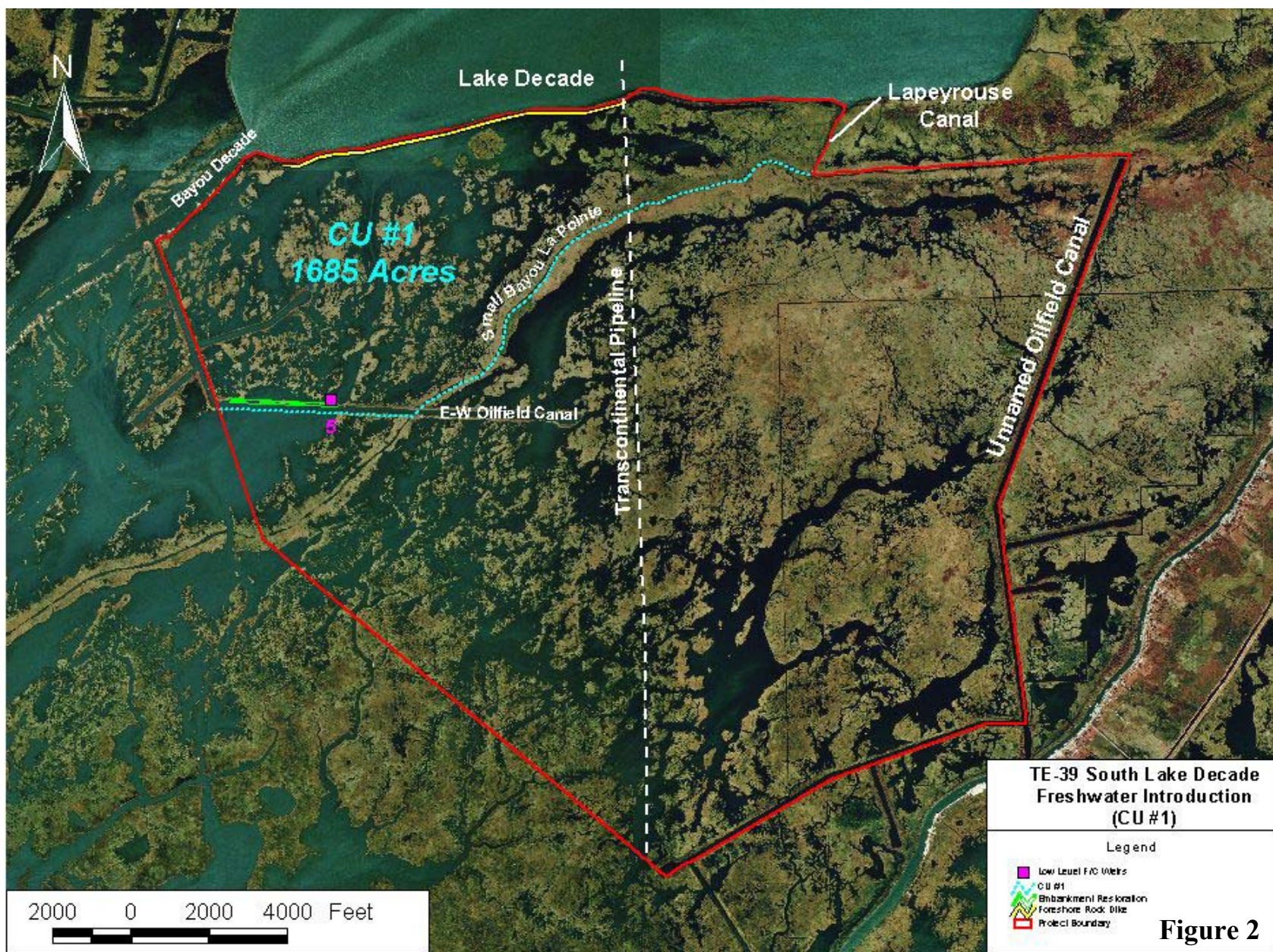
**P. Categorical breakdown for Phase 2.**



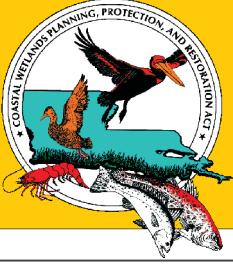


**Figure 1**









# South Lake De Cade Freshwater Introduction (TE-39)

## Project Status

**Approved Date:** 2000      **Project Area:** 7,343 acres  
**Approved Funds:** \$495,611      **Total Est. Cost:** \$5.8 M  
**Net Benefit After 20 Years:** 201 acres  
**Status:** Engineering and Design  
**Project Type:** Freshwater Diversion and Shoreline Protection

## Location

The project is located in Terrebonne Parish, approximately 15 miles southwest of Houma, Louisiana.

## Problems

The project area is experiencing marsh deterioration due to subsidence, rapid tidal exchange, and human-induced hydrologic changes that result in increased salinities. Saltwater intrusion has caused a shift in marsh type and a conversion of over 30 percent of emergent vegetation to open water habitat. Shoreline erosion along the south embankment of Lake De Cade threatens to breach the hydrologic barrier between the lake and interior marshes.

## Restoration Strategy

Proposed project components include installing three control structures along the south rim of the lake and enlarging Lapeyrouse Canal to allow the controlled diversion of Atchafalaya River water, nutrients, and sediments south into project area marshes. Outfall management structures are planned in the marsh interior to provide better distribution of river water. In addition, approximately 1.6 miles of foreshore rock dike is planned to protect the critical areas of the south lake shoreline from breaching.



Lapeyrouse Canal will function as one of three freshwater introduction sites along the south rim of Lake De Cade after obstructions are removed and the canal reinforced.

## Progress to Date

After initial engineer investigation the project was divided into two construction units. Construction unit one will consist of the shoreline protection components. The other will be freshwater introduction components. Engineering and design has begun on the shoreline protection components of the project. Data gathering and analysis is being conducted on the freshwater diversion aspects of the project.

This project is on Priority Project List 9.

*For more project information, please contact:*










**Federal Sponsor:**  
 Natural Resources Conservation Service  
 Alexandria, LA  
 (318) 473-7756



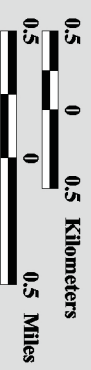
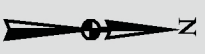
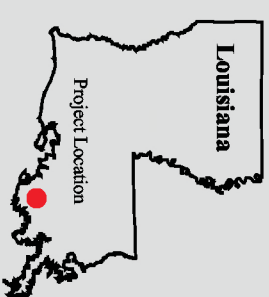
**Local Sponsor:**  
 Louisiana Department of Natural Resources  
 Baton Rouge, LA  
 (225) 342-7308



# South Lake De Cade Freshwater Introduction (TE-39)

-  Construction Unit 1  
Shoreline Protection \*
-  Construction Unit 2  
Freshwater Introduction \*
-  Plug \*
-  Weir \*
-  Containment Dike \*
-  Dredge Channel \*
-  Project Boundary
- \* denotes proposed features

**USGS**  
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Map Produced By:  
U.S. Department of the Interior  
U.S. Geological Survey  
National Wetlands Research Center  
Coastal Restoration Field Station

Background Imagery:  
1998 Digital Orthophoto Quarter Quadrangle  
Map Date: October 1, 2003  
Map ID: USGS-NWRC 2003-11-067  
Data accurate as of: October 1, 2003





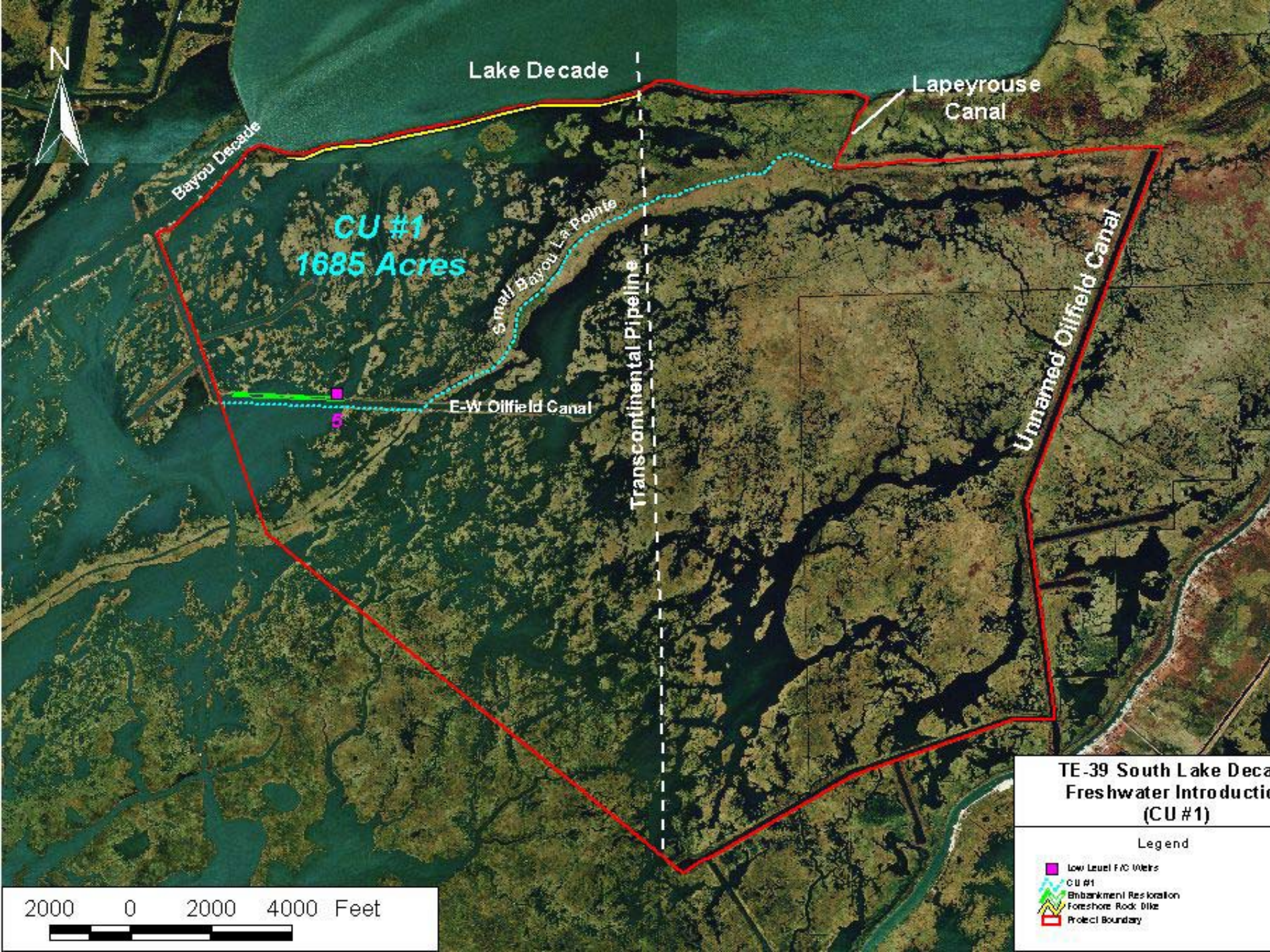
*Coastal Wetlands Planning,  
Protection and Restoration  
Act*



SOUTH LAKE DECADE  
FRESHWATER INTRODUCTION  
CONSTRUCTION UNIT #1  
(TE-39)

*CWPPRA Task Force Meeting*  
*October 13, 2004*





N

Lake Decade

Lapeyrouse  
Canal

Bayou Decade

CU #1  
1685 Acres

Small Bayou La Pointe

Transcontinental Pipeline

E-W Oilfield Canal

Unnamed Oilfield Canal

TE-39 South Lake Decade  
Freshwater Introduction  
(CU #1)

Legend

- Low Level FAC Weirs
- CU #1
- Bankbankment Restoration
- Foreshore Rock Dike
- Project Boundary

2000 0 2000 4000 Feet



# SOUTH LAKE DECADE – CU #1

## PROBLEMS?

- Shoreline Erosion
- Saltwater Intrusion
- Relative Sea Level Rise
- Subsidence

# **SOUTH LAKE DECADE – CU #1**

## **PROJECT FEATURES**

- 8,700 LF of Shoreline Rock Revetment
- 2,900 LF of Armored Embankment Restoration
- Low Level Rock Weir

# **SOUTH LAKE DECADE – CU #1**

## **CWPPRA SOP Phase II Requirements**

**Cost Sharing Agreement – July 25, 2000**

**Land Rights Notification – September 2, 2004**

**Favorable 30% Design Review – July 19, 2004**

**Favorable 95% Design Review – September 2, 2004**

**Environmental Assessment – Final June 2001**

**Ecological Review – Draft August 2004**

**Permits – Application Pending**

**Section 303(e) Approval – August 4, 2004**

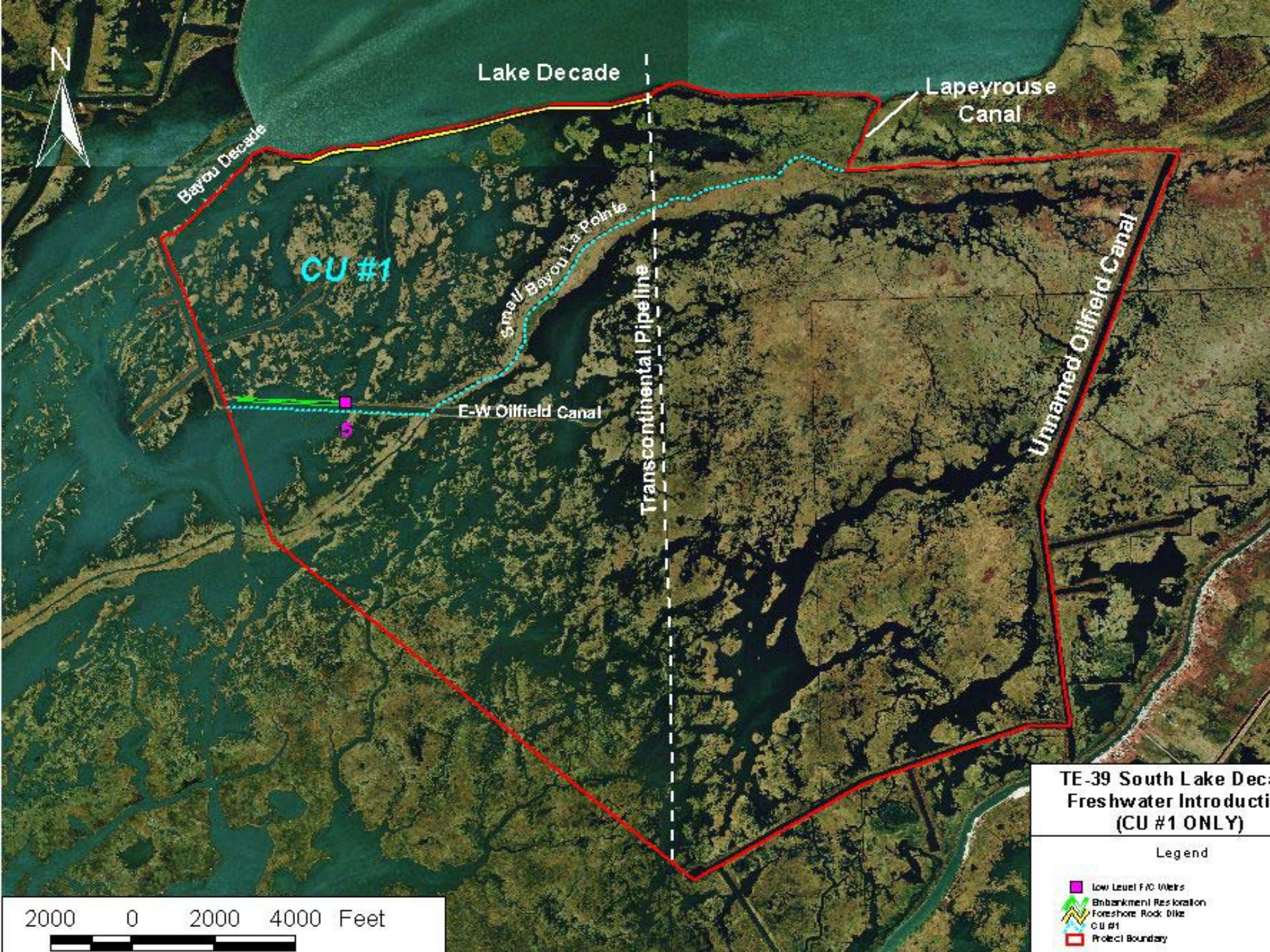
**Current Cost Estimate – August 27, 2004**

**Prioritization Update – August 28, 2004**

# SOUTH LAKE DECADE – CU #1

- Low Cost \$2,511,857
- Initial Attention to Critical Area
- High Prioritization Score <73.45>
- 100% Landowner Support
- Rapid Loss of Fresh/Intermediate Marsh
- Immediate Need









MAY 28 2004

United States Department of Agriculture



Natural Resources Conservation Service  
3737 Government Street  
Alexandria, Louisiana 71302

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September 8, 2004

Ms. Julie LeBlanc, Chairman  
CWPPRA Planning and Evaluation Subcommittee  
U.S. Army Corps of Engineers  
Planning, Programs, and Project Management Division  
P.O. Box 60267  
New Orleans, LA 70160-0267

Dear Ms. LeBlanc:

RE: TE-43 GIWW Bank Restoration of Critical Areas  
"Cash-Flow" Phase Two Authorization Request

Pursuant to Revision 9.0 of the CWPPRA Standard Operating Procedures (Section 6.j. and Appendix C), please find enclosed the Phase Two Authorization Request package. This request is for the construction of 41,000 feet of shoreline protection located on the southern bank of the Gulf Intracoastal Waterway in Terrebonne Parish. This project was authorized in 2001 by the CWPPRA Task Force.

If you or any members of the Planning and Evaluation Subcommittee, Technical Committee or Task Force have any questions regarding this matter, please call me at (318) 473-7756.

Sincerely,

A handwritten signature in dark ink, appearing to read "W. Britt Paul", is written over a light-colored background.

W. Britt Paul  
Assistant State Conservationist  
for Water Resources and Rural Development

Enclosure

cc: John Saia, Technical Committee Chair, USACE, New Orleans, Louisiana  
Darryl Clark, Technical Committee Member, USFWS, Lafayette, Louisiana  
Rick Hartman, Technical Committee Member, NMFS, Baton Rouge, Louisiana  
Sharon Parrish, Technical Committee Member, EPA, Dallas, Texas  
Phil Pittman, P&E Subcommittee Member, LDNR, Baton Rouge, Louisiana  
Martha Segura, P&E Subcommittee Member, USFWS, Lafayette, Louisiana  
Rachel Sweeney, P&E Subcommittee Member, NMFS, Baton Rouge, Louisiana  
Wes McQuiddy, P&E Subcommittee Member, EPA, Dallas, Texas

John Jurgensen, P&E Subcommittee Member, NRCS, Alexandria, Louisiana  
Cynthia Duet, Governor's Office of Coastal Activities, Baton Rouge, Louisiana  
Ismail Merhi, Project Manager, LDNR, Baton Rouge, Louisiana  
Andy Tarver, Civil Engineer/Project Manager, NRCS, Alexandria, Louisiana  
Ronnie Faulkner, Design Engineer, NRCS, Alexandria, Louisiana  
Randolph Joseph, Jr., Area Conservationist, NRCS, Lafayette, Louisiana  
Michael Trusclair, District Conservationist, NRCS, Thibodaux, Louisiana  
Gerry Duszynski, Assistant Secretary, LDNR/OCRM, Baton Rouge, Louisiana  
Chris Knotts, Administrator Coastal Engineering Activities, LDNR, Baton Rouge, Louisiana  
Kirk Rhinehart, Administrator Coastal Restoration Activities, LDNR, Baton Rouge, Louisiana



## **Phase II Authorization Request**

### **TE-43 GIWW BANK RESTORATION OF CRITICAL AREAS INCREMENT 1 – AREA ‘G’**

#### **Description of Phase I Project**

The TE-43 GIWW Critical Areas project was approved relative to the tenth CWPPRA Priority Project List. The Natural Resources Conservation Service (NRCS) is the federal sponsor for this project. The objective of this project is to protect critically eroding portions of the southern bank of the Gulf Intracoastal Waterway (GIWW).

The Gulf Intracoastal Waterway (GIWW) Bankline Restoration Project is located in Terrebonne Parish approximately ten miles east of the Lower Atchafalaya River and ten miles southwest of Houma, Louisiana. The specific location proposed for the structures is the southern bank of the GIWW originating at a point close to mile marker 80 and terminating at a point close to mile marker 70.

In the past 20 years, as the efficiency of the Lower Atchafalaya River has decreased, Lake Verret subbasin flooding and Atchafalaya River flows via the GIWW have increased. Deterioration of fresh and intermediate wetlands, particularly the floating marsh, in the upper Penchant basin has been attributed to sustained elevated water levels. In addition, wave and resorb action from commercial and recreational traffic on the GIWW has caused floating marshes in some areas to become directly exposed to increased circulation through unnatural connections formed where channel banks have deteriorated.

The objective of the GIWW Bankline Restoration project is to protect critically eroding portions of the southern bank of the GIWW that act as an interface between the fragile fresh marshes and the turbulent high velocities that occur within the GIWW. Proposed measures include installing shoreline protection structures along the southern bank of the GIWW. The structures will provide protection to the banks of the GIWW, which have experienced severe erosion since the construction of the GIWW in the early 1950's.

The project goals were: 1) To enable the GIWW to function as a conveyance channel to direct Atchafalaya River freshwater flow to specific locations that would benefit from increased flows of fresh water and nutrients, and 2) To provide relief to marshes connected to the GIWW that are currently suffering from prolonged inundation and wave action while stopping shoreline erosion along the remaining bank of the GIWW.

The proposed solution was to restore critical lengths of deteriorated channel banks, and stabilize/armor selected critical lengths of deteriorated channel banks with hard shoreline stabilization materials.

The Wetland Value Assessment conducted for the Phase I project estimated a benefited area of 3,324 acres and the net acres created/protected/restored of 366 acres at TY20.

The original project fact sheet is on the following two pages.



# GIWW Bank Restoration of Critical Areas in Terrebonne (TE-43)

## Project Status

**Approved Date:** 2001      **Project Area:** 3,324 acres  
**Approved Funds:** \$2.2 M      **Total Est. Cost:** \$19.7 M  
**Net Benefit After 20 Years:** 366 acres  
**Status:** Engineering and Design  
**Project Type:** Shoreline Protection

## Location

The project is located in the Terrebonne basin, in Terrebonne Parish, Louisiana.

## Problems

In the past 20 years, as the efficiency of the Lower Atchafalaya River has decreased, Verrett subbasin flooding and Atchafalaya River flows via the Gulf Intracoastal Waterway (GIWW) have increased. Deterioration of fresh and intermediate wetlands, particularly of the floating marshes in the upper Penchant basin, has been attributed to sustained elevated water levels. In addition, floating marshes in some areas have become directly exposed to increased circulation through unnatural connections formed where channel banks deteriorated.

Conversely, losses in the central Terrebonne Parish marshes have been attributed to the elimination of riverine inflow coupled with subsidence and altered hydrology from canal dredging that facilitated saltwater intrusion. Increased flow of the GIWW and wave pulses from navigation traffic are causing additional breakup and loss of floating marshes in unprotected areas.

## Restoration Strategy

This project will restore critical lengths of deteriorated channel banks and stabilize/armor selected critical lengths of deteriorated channel banks with hard shoreline stabilization materials.

## Progress to Date

Geotechnical soils investigation report is complete. Soils in the area are very soft and fluid.

This project is on Priority Project List 10.



Large mats of floating freshwater marsh, such as this one, detach from their point of origin and enter the GIWW through large breaches in the existing shoreline.



Concrete "H" pile/panel structures, similar to this one, will be installed at locations within the project area where shoreline erosion is critical. Soils with high amounts of organic material, which have poor strength, necessitated the use of a structure such as this.

*For more project information, please contact:*



**Federal Sponsor:**  
Natural Resources Conservation Service  
Alexandria, LA  
(318) 473-7756



**Local Sponsor:**  
Louisiana Department of Natural Resources  
Baton Rouge, LA  
(225) 342-7308





# **GIWW Bank Restoration of Critical Areas in Terrebonne (TE-43)**

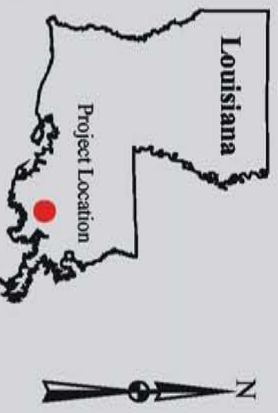


**Shoreline Protection**



**Project Boundary**

**USGS**  
science for a changing world



Map Produced By:  
U.S. Department of the Interior  
U.S. Geological Survey  
National Wetlands Research Center  
Coastal Restoration Field Station

Background Imagery:  
2002 Thematic Mapper Imagery

Map Date: August 27, 2003  
Map ID: 2002-11-547  
Data accurate as of: April 4, 2003

frequently flooded, Barbary muck – frequently flooded, Gramercy/Cancienne – silty clay loam, and Allemands muck – very frequently flooded (NRCS 2002, unpublished data).

The mudline at the boring locations varied from elevations 0.0 to -3.0 NAVD88 and was located from 1 foot to 4 feet below the water surface at the time of drilling.

The upper soils are typically highly organic, classifying as high plastic clays with organic matter, organic clays, or peats. In general, soft consistencies are not encountered until depths exceed 30 feet with some medium stiff consistencies occurring below approximately 60 feet.

Water contents ranged from 29 percent on a sample of silty sands to 1,004 percent on a sample of peat with approximately two thirds of the water contents exceeding 100 percent.

Liquid limits ranged from 34 on a sample of silty clays to 807 percent on a sample of peat. More than 97 percent of the liquid limits exceeded 50 percent, and approximately 82 percent of the liquid limits exceed 100 percent.

Plastic limits ranged from 20 on a sample of silty clays to 450 percent on a sample of organic clays. However, about 96 percent of the plastic limits were between 20 and 100 percent, and slightly more than 86 percent of the plastic limits were between 20 and 50 percent.

Plasticity indices ranged from non-plastic on a sample of peat to 557 percent on a sample of clays with peat seams and pockets with nearly 90 percent of the plasticity indices exceeding 50 percent and slightly more than 73 percent of the plasticity indices exceeding 100 percent.

Unconfined and triaxial compression tests yielded cohesions ranging from 22 lbs per sq ft to 603 lbs per sq ft, except for one unconfined compression test which yielded a cohesion value of 1,328 lbs per sq ft. Slightly more than 88 percent of the unconfined and triaxial compression tests yielded cohesions below 250 lbs per sq ft, which is the upper limit of a very soft consistency. Slightly more than 36 percent of the unconfined and triaxial compression tests yielded cohesions below 100 lbs per sq ft.

Field vane test performed generally in the upper soils yielded cohesions ranging from 37 lbs per sq ft to 268 lbs per sq ft with nearly 40 percent of the field vane tests yielding cohesions below 100 lbs per sq ft.

### Hydrology and Hydraulics

The water levels in the watershed are influenced by tides and wind. The mean high water is 2.0' NAVD88. The mean low water is 0.5' NAVD88.

### Engineering and Design Tasks

The Department of Natural Resources letter “RE: Generalized Guidelines for Coastal Structures Design Parameters” dated January 07, 2000, and its attachment “Design Guidelines for CWPPRA Shoreline Protection Structures” were used to determine the wave heights used to design the rock / rock composite dike. Under the guidelines set forth in the letter a still water elevation (SWE), a wave height, the height of the structure, and the wave forces must be determined. In an effort to be conservative, the SWE was set at the storm water elevation of +2.5 NAVD88. Concurrently, the average bottom elevation was determined to be approximately -1.5 NAVD88.

Minimum and maximum design wave heights are determined according to the guidelines, where the minimum wave height is equal to 2.0 feet unless this is greater than the water depth and the maximum wave height is 0.78 times the water depth. Therefore the minimum and maximum wave heights were set at 2.0 and 3.12 feet respectively.

A wind generated wave height was determined using a 70 mph wind. The maximum peak gust, 70 mph, was chosen out of a comparison of New Orleans, Lake Charles and Baton Rouge wind speeds, provided in NOAA's "Climatic Wind Data for the United States". The wave height for this wind speed was used as an input for the ACES program in which wind in shallow and deep open water conditions was determined. The shallow and deep open water wave conditions return wave heights of 1.44 and 1.67 feet respectively. Along with these wave heights, one other wave height was determined. This is the wave height due to boat traffic. Since most of the traffic in the GIWW is crew boats a wave height of 3.0 feet was used in accordance with the guidelines.

The minimum top elevation of the structure was determined to be 3.5 NAVD88 based on the ability of the structure to be overtopped, and the guidelines. The wave impact forces were determined by deciding if the maximum wave height is breaking or non-breaking. This is done using the Shore Protection Manual (SPM), Chapter 2, Section VI, Part 2. In this case, a wind duration of 2.0 seconds was used, which allowed for the determination of the deepwater wave steepness, 0.024. The deepwater wave steepness is used as an input into Figure 2-72 of the SPM in order to determine the breaker height index, which in turn is used to determine the breaking wave height, 3.0 feet. The breaking wave height was then used as an input in Equation 2-92 of the SPM in order to determine the depth of water that the breaking wave would break at, 4.59 feet. Since the depth of water at which the wave would break at is greater than the depth of water at the structure, the wave will break before it reaches the structure, and thus is not a concern in the design of the structure.

The geotechnical investigation provided the minimum slopes for a composite and a rock dike. With this information in combination with the settlements for each type of section, also provided in the geotechnical investigation, a determination of the most economic design method (rock / composite) was made on a per reach basis. The most economic method per reach was used as the determining factor for which sections of the dike would be composite rather than rock only. These determinations led to the specification of 2:1 (H:V) side slopes for the rock only sections and 2.5:1 (H:V) side slopes for the composite sections, based on the minimum slopes provided by the geotechnical investigation.

With the maximum wave height, wave forces, and side slopes determined the size of the rock riprap was determined to be a Corps of Engineers R-1000 gradation. This was done using equation 7-117 from the SPM, with a stability coefficient of 2.2, and the two side slopes (2:1, 2.5:1) that were proposed for this structure. The top width of the structure was determined to be 3.0 feet using equation 7-120 of the SPM, with the median size of the gradation above.

A layer thickness for the composite sections of the structure had to be determined. This was accomplished using equations 7-123 and 7-124 of the SPM. The maximum thickness from these two equations was determined to be 1.6 feet. To be conservative a 2.0 foot layer thickness has been specified for the structure design.

Design meetings were held at the 30% (May 25, 2004) and 95% (August 26, 2004) levels.



## Landrights, Cultural Resources, Environmental Compliance and Other Tasks

Preliminary landrights has proceeded smoothly and no problems are anticipated in acquiring final landrights.

No cultural resource sites are located within the project area.

Environmental concerns were considered in the planning and design of this project. A FONSI, Environmental Assessment, and Ecological Review Report have been drafted. A Section 404 permit application has been sent to the USACE. A Storm Water Pollution Prevention Plan will be required for this project since the disturbed construction site is more than one (1) acre. A permit to dredge material for construction is being obtained by the local sponsors from the U.S. Corps of Engineers and the Louisiana Department of Natural Resources, Coastal Zone Management.

A draft Ecological Review is available and a final EA dated December, 2002 was developed after receiving comments on the draft EA which was submitted for public comment in April, 2002.

## **Description of the Phase II Candidate Project**

### Project Features

Final design features are essentially unchanged from the original Phase I project. The project contains shoreline protection by means of a hard shoreline structure. However, the Phase 0 approved length of the structure was approximately 38,000 feet whereas the length of the Designed project is approximately 41,000 feet.

The work to be accomplished will consist of the installation of approximately 41,000 feet of shoreline protection along the southern shoreline of the GIWW by constructing a rock rip-rap dike and in places of poor soil bearing capacities constructing a composite rock rip-rap dike with a lightweight core aggregate as seen in Figures 1-3. For typical rock dike sections refer to Figures 4 and 5.

There is historical knowledge that channelized structures in similar situations are able to be built and adequately withstand the wave forces that they are put up against. Examples of such projects are Perry Ridge CU#1, Perry Ridge CU#2, and Cameron Prairie, all of which are located along the GIWW, as is this project. Other such structures are East Sabine, which is located in the Sabine National Wildlife Refuge, and the Freshwater Bayou CU#2 project. Additionally, the analysis and results included in the geotechnical investigations support the concept that a rock / rock composite structure is capable of being constructed, and establishes the required stable side slopes as well as expected settlements.

See 'Overview of Phase I Tasks' above.

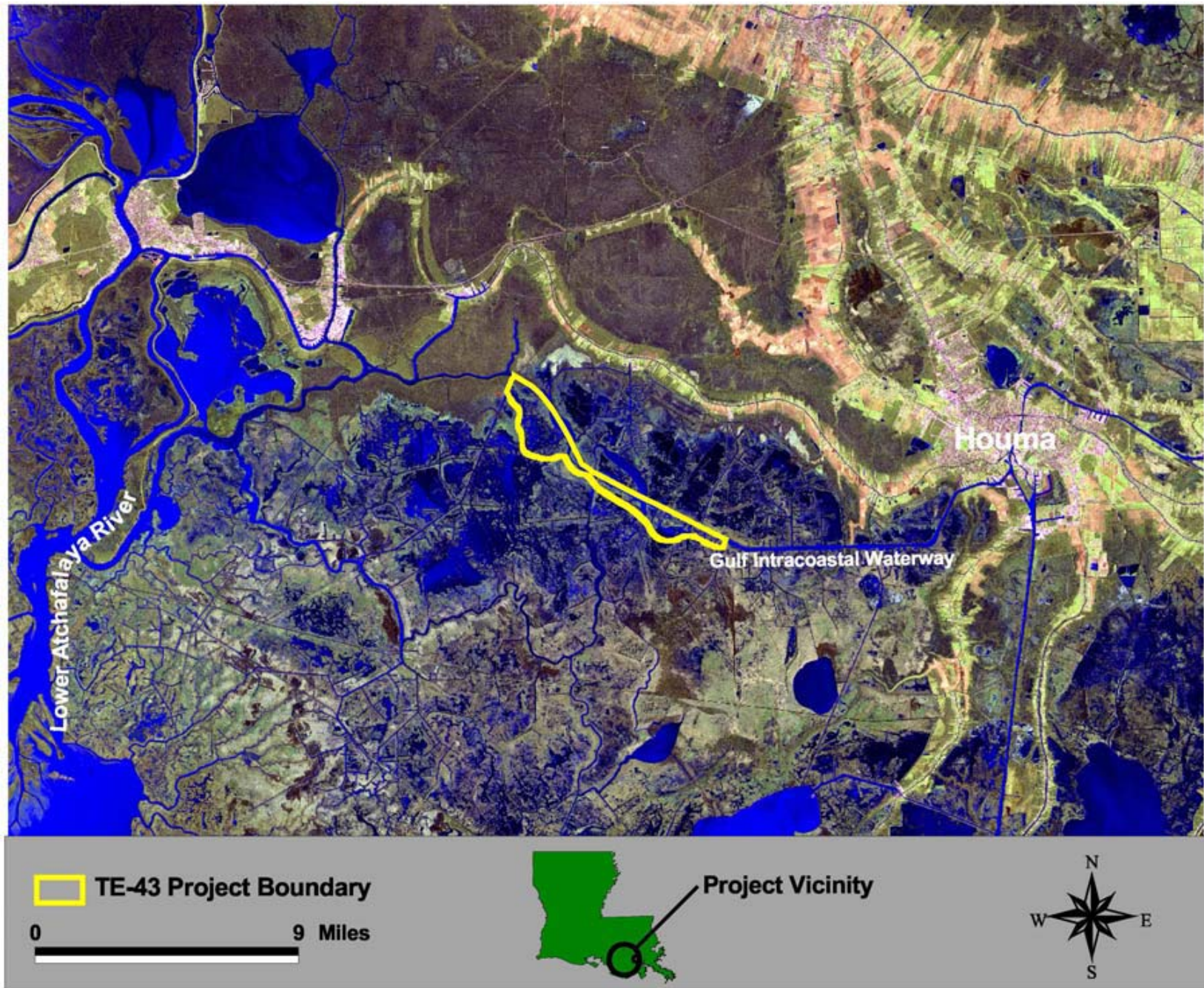


Figure 1. GIWW Bank Restoration of Critical Areas in Terrebonne (TE-43).



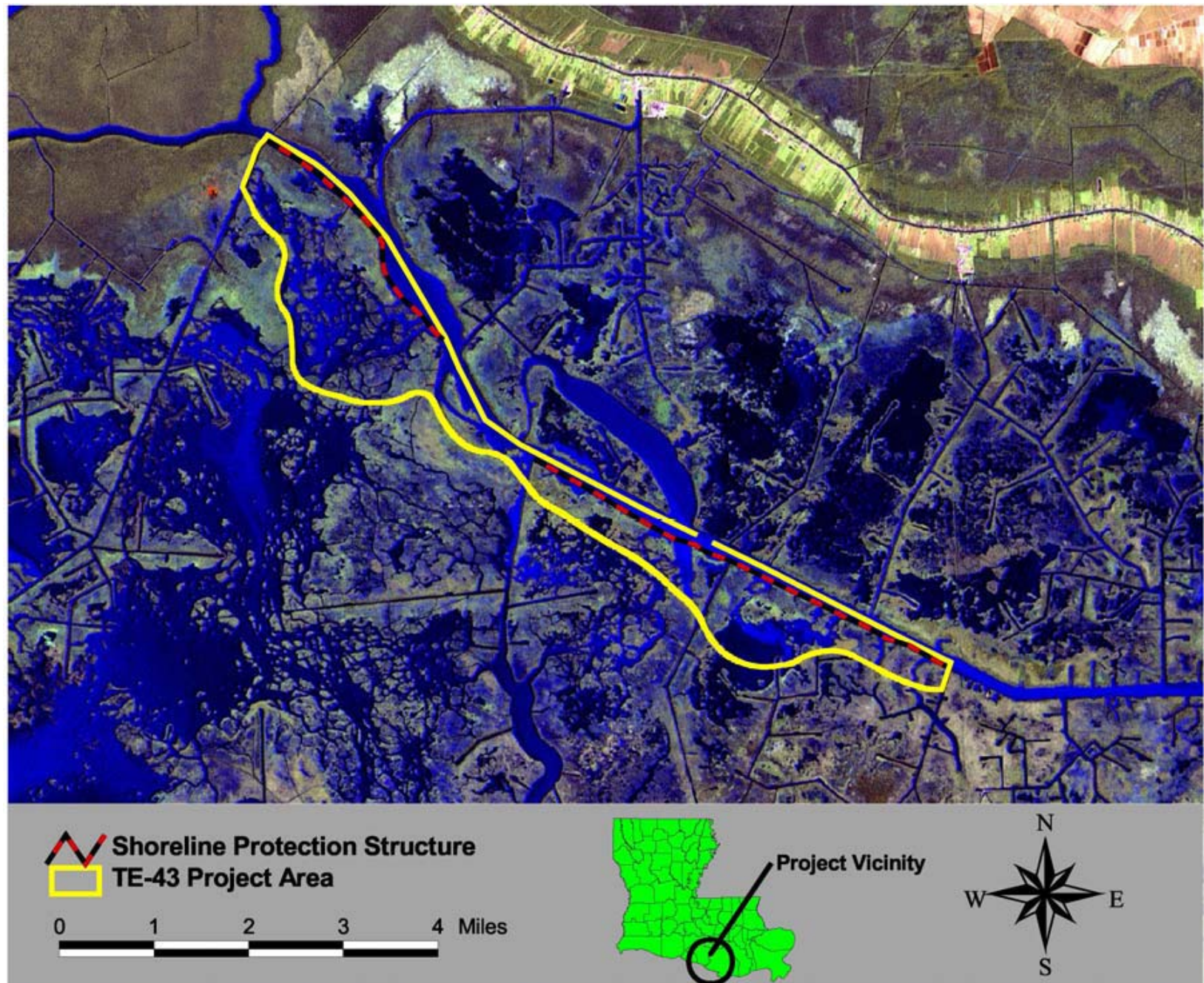


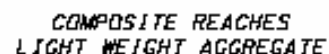
Figure 2. GIWW Bank Restoration of Critical Areas in Terrebonne (TE-43).





Figure 3. GIWW Bank Restoration of Critical Areas in Terrebonne (TE-43).





SEMIWY	REACH	STYLE
1	0+00 +a 11+00	0.54
2	11+00 +a 21+00	0.61
2	21+00 +b 30+00	0.65
2	30+00 +b 41+00	0.60
2	41+00 +b 50+00	0.81
3	0+00 +b 13+00	0.50
4	7+00 +b 18+00	1.18
4	27+00 +a 50+00	1.02
4	50+00 +a 50+00	1.00
4	50+00 +a 50+00	1.00
5	15+00 +a 29+00	1.52
6	0+00 +a 4+00	0.61
6	4+00 +b 15+00	1.55
6	45+00 +a 45+00	1.60
6	45+00 +b 50+00	1.62
6	50+00 +b 60+00	1.63
8	50+00 +a 50+00	1.30
7	0+00 +b 7+00	1.47

THE MIN. DISTANCE SHALL BE 30' EXCEPT FOR THE FOLLOWING REACHES WHICH SHALL BE 40' SEGMENT 3-STA. 1+100-3+135, SEGMENT 4-STA. 0+100-3+100, SEGMENT 8-STA. 18+100-24+100.

**Figure 5 – Typical Composite Rock Dike Section.**

## **Checklist of Phase Two Requirements**

### **TE-43 GIWW BANK RESTORATION OF CRITICAL AREAS INCREMENT 1 – AREA ‘G’**

#### **A. List of Project Goals and Strategies.**

The project goals are: 1) To enable the GIWW to function as a conveyance channel to direct Atchafalaya River freshwater flow to specific locations that would benefit from increased flows of fresh water and nutrients, and 2) To provide relief to marshes connected to the GIWW that are currently suffering from prolonged inundation and wave action while stopping shoreline erosion along the remaining bank of the GIWW.

#### **B. A Statement that the Cost Sharing Agreement between the Lead Agency and the Local Sponsor has been executed for Phase I.**

A Cost Share Agreement between the Natural Resources Conservation Service and Louisiana Department of Natural Resources was executed on May 16, 2001. A draft amendment, authorizing construction, operation, maintenance, and monitoring, to the Cost Share Agreement has been prepared.

#### **C. Notification from the State or the Corps that landrights will be finalized in a short period of time after Phase 2 approval.**

NRCS has requested the required letter from DNR relative to landrights being finalized in a relatively short time after Phase 2 approval.

#### **D. A favorable Preliminary Design Review (30% Design Level). The Preliminary Design shall include completion of surveys, borings, geotechnical investigations, data analysis review, hydrologic data collection and analysis, modeling (if necessary), and development of preliminary designs.**

A 30% design review meeting was held on May 25, 2004, and resulted in favorable reviews of the project design with minor modifications. DNR and NRCS agreed on the project design and agreed to proceed to the 95% design level and with project implementation.

#### **E. Final Project Design Review (95% Design Level). Upon completion of a favorable review of the preliminary design, the Project plans and specifications shall be developed and formalized to incorporate elements from the Preliminary Design and the Preliminary Design Review. Final Project Design Review (95%) must be successfully completed prior to seeking Technical Committee approval.**

A 95% design meeting was held on August 26, 2004, and resulted in favorable reviews of the project design with no modifications and few comments. DNR and NRCS agreed on the project design and agreed to proceed with project implementation.

**F. A draft of the Environmental Assessment of the Project, as required under the National Environmental Policy Act must be submitted thirty days before the request for Phase 2 approval.**

A final EA dated December, 2002 was developed after receiving comments on the draft EA which was submitted for public comment in April, 2002.

**G. A written summary of the findings of the Ecological Review (See Appendix B).**

A favorable 95% Design Review was conducted on August 26, 2004. The following paragraph is from the Recommendations section of the August 2004 draft Ecological Review:

*Based on information gathered from similar restoration projects, engineering designs, and related literature, the proposed strategies in the GIWW Bank Restoration of Critical Areas in Terrebonne project will likely achieve the desired goals provided Operation and Maintenance funds are available for structure rehabilitation. It is recommended that this project progress towards construction authorization pending a favorable 95% Design Review.*

**H. Application for and/or issuance of the public notices for permits. If a permit has not been received by the agency, a notice from the Corps of when the permit may be issued.**

An application for the Section 404 permit, CZM Consistency Determination, and Water Quality Certification was submitted in October 2004.

**I. A hazardous, toxic and radiological waste (HTRW) assessment, if required, has been prepared.**

NRCS procedures do not call for an HTRW assessment on this project.

**J. Section 303(e) approval from the Corps.**

Section 303(e) approval was granted by the Corps via letter dated July 8, 2003.

**K. Overgrazing determination from the NRCS (if necessary).**

NRCS has determined that overgrazing is not, and is not anticipated to be, a problem in the project area.



**O. A breakdown of the Prioritization Criteria ranking score, finalized and agreed-upon by all agencies during the 95% design review.**

The following Prioritization Criteria scores were reviewed and agreed upon by all agencies.

<b>Criteria</b>	<b>Score</b>	<b>Weight</b>	<b>Final Score</b>
Cost Effectiveness	2.5	2	5
Area of Need	7.5	1.5	11.25
Implementability	10	1.5	15
Certainty of Benefits	8	1	8
Sustainability of Benefits	4	1	4
HGM – Riverine Input	0	1	0
HGM – Sediment Input	0	1	0
HGM – Landscape Features	0	1	0
<b>Total Score</b>			<b>43.25</b>



































# *Coastal Wetlands Planning, Protection and Restoration Act*

## GIWW Bankline Restoration of Critical Areas (TE-43)

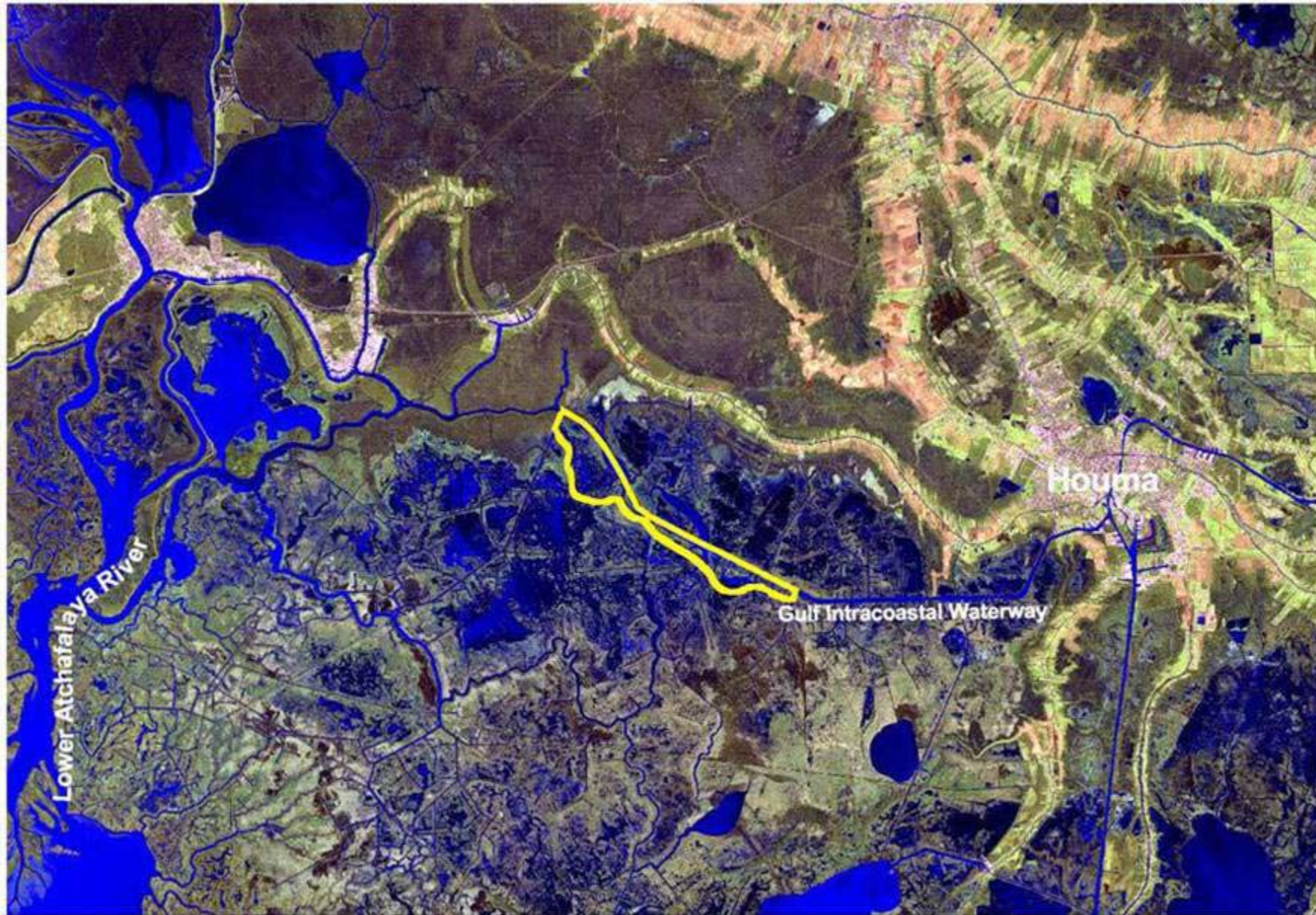
*CWPPRA Task Force Meeting  
October 13, 2004*


# GIWW Bankline Restoration of Critical Areas (TE-43)

## Project Goals:

- 1) Enable the GIWW to function as a conveyance channel, directing freshwater flow to the East.
- 2) Protect marshes connected to the GIWW while stopping a 15 ft/yr shoreline erosion rate along the remaining bank of the GIWW.





 TE-43 Project Boundary

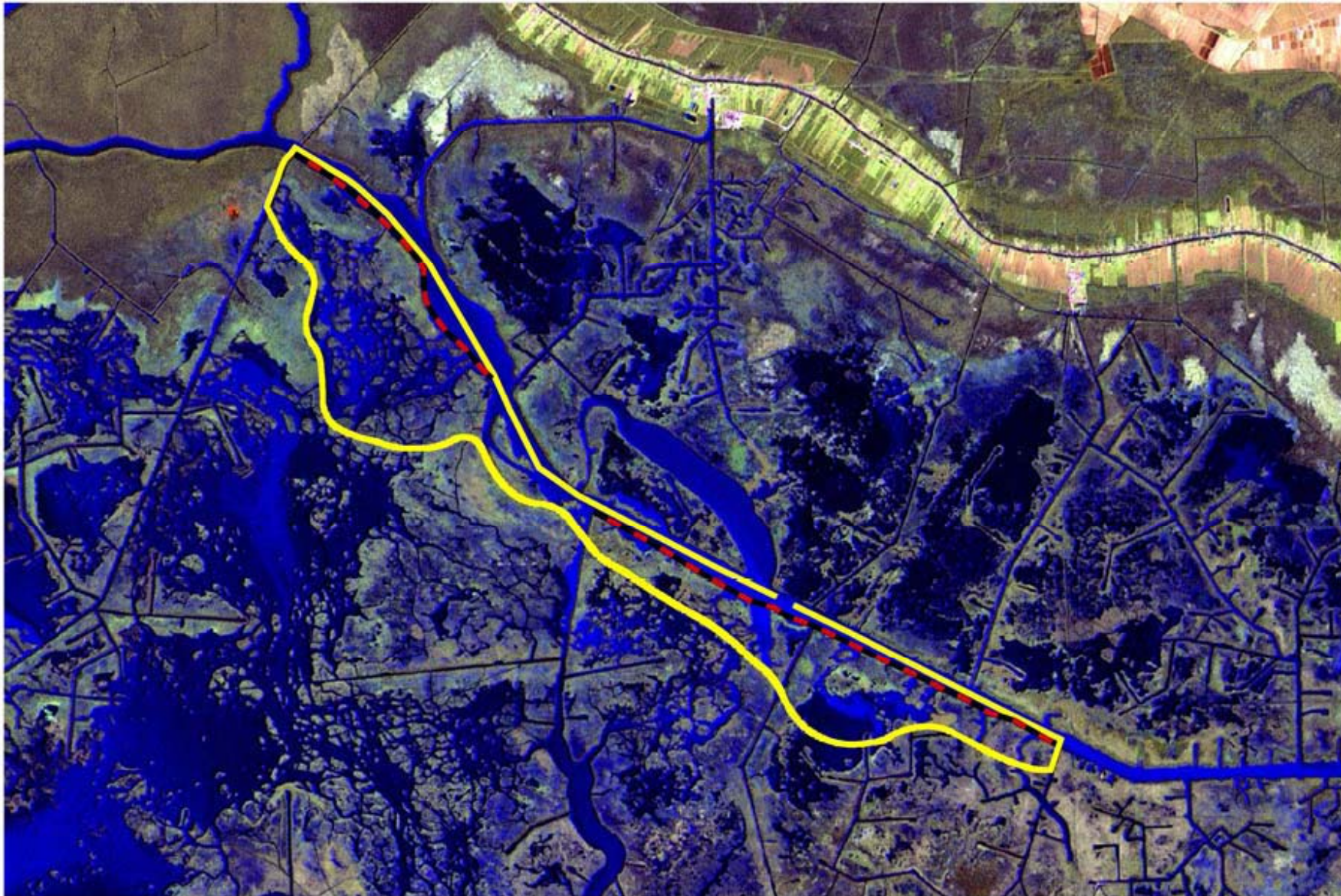
0 9 Miles



Project Vicinity







 Shoreline Protection Structure  
 TE-43 Project Area

0 1 2 3 4 Miles



Project Vicinity







COMPOSITE REACHES  
LIGHT WEIGHT AGGREGATE

SEGMENT	REACH	CWT/F
1	0+00 to 11+00	0.44
2	11+00 to 21+00	0.31
3	21+00 to 30+00	0.66
4	30+00 to 41+00	0.40
5	41+00 to 74+00	0.41
6	0+00 to 13+00	0.38
7	7+00 to 18+00	1.18
8	27+00 to 39+00	1.02
9	39+00 to 54+00	1.19
10	50+00 to 55+00	1.30
11	10+00 to 24+00	1.42
12	0+00 to 4+00	0.21
13	4+00 to 16+00	1.56
14	40+00 to 45+00	1.46
15	45+00 to 58+00	1.32
16	58+00 to 62+00	1.33
17	15+00 to 20+00	1.40
18	0+00 to 7+00	1.47

PRELIMINARY

THIS DOCUMENT SHALL  
NOT BE USED FOR  
CONSTRUCTION, BIDDING,  
ACQUISITION, OR OTHERWISE,  
BASED ON OR IN THE BASIS  
FOR THE DETERMINATION  
OF A PERMIT

PROJECT PLAN MAP - TE-43







10/10/2010













# GIWW Bankline Restoration of Critical Areas (TE-43)

## Selected Check List Items

Cost Sharing Agreement – May 16, 2001

Favorable 30% Design Review – May 25, 2004

Favorable 95% Design Review – August 26, 2004

Ecological Review – August, 2004

Permits Submitted – October, 2004

Final Environmental Assessment – December, 2002

# GIWW Bankline Restoration of Critical Areas (TE-43)

"Why do we need to fund this project now - why should we NOT wait for a year?"

- Fragile floating marsh being destroyed.
- 15 ft/yr shoreline erosion rate.
- Enhance a component of the LCA near-term critical restoration features by enabling the GIWW to function as a conveyance channel to direct Atchafalaya River freshwater flow to the east.
- Maintain a vital transportation thoroughfare.





# *Coastal Wetlands Planning, Protection and Restoration Act*

## GIWW Bankline Restoration of Critical Areas (TE-43)

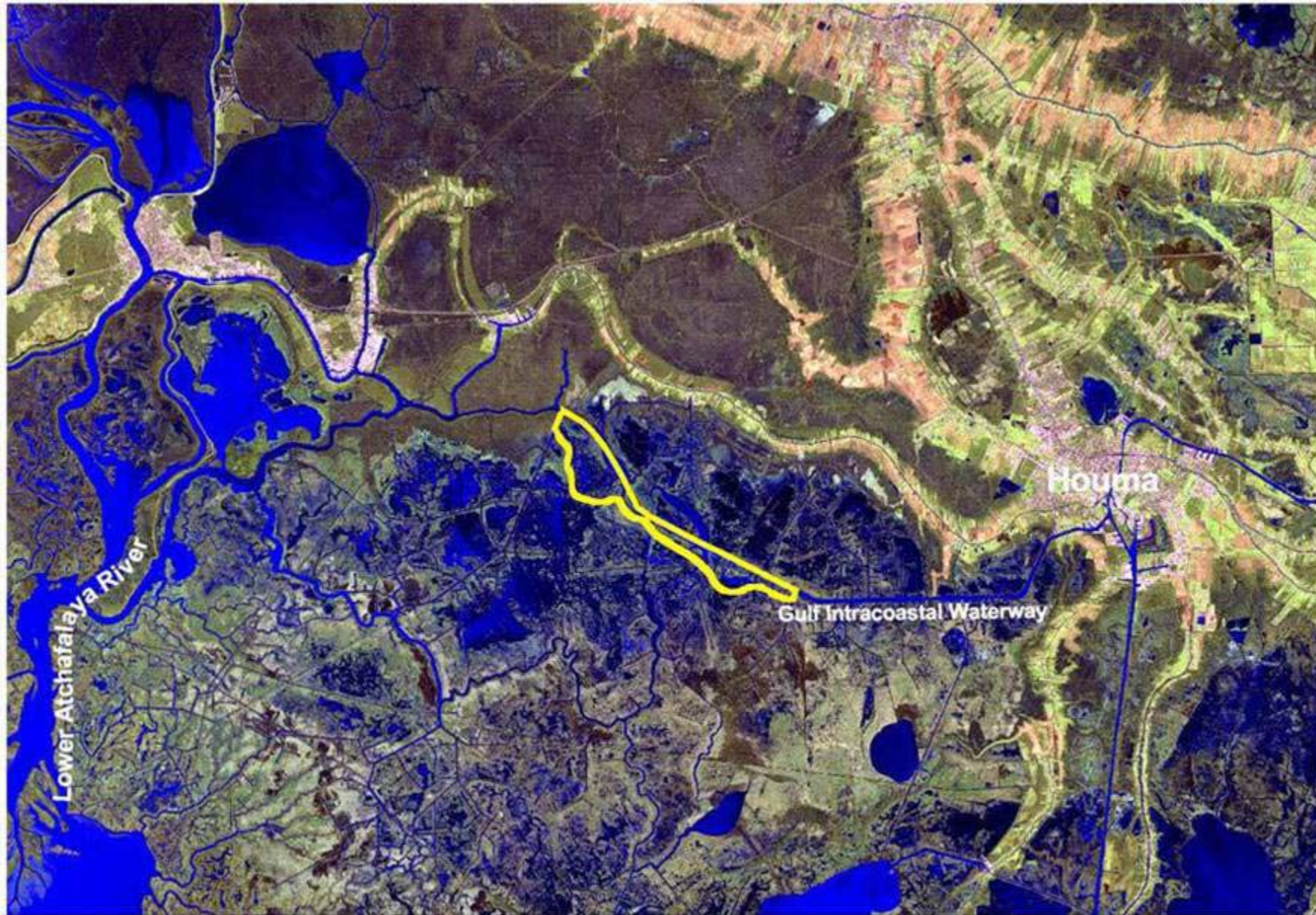
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
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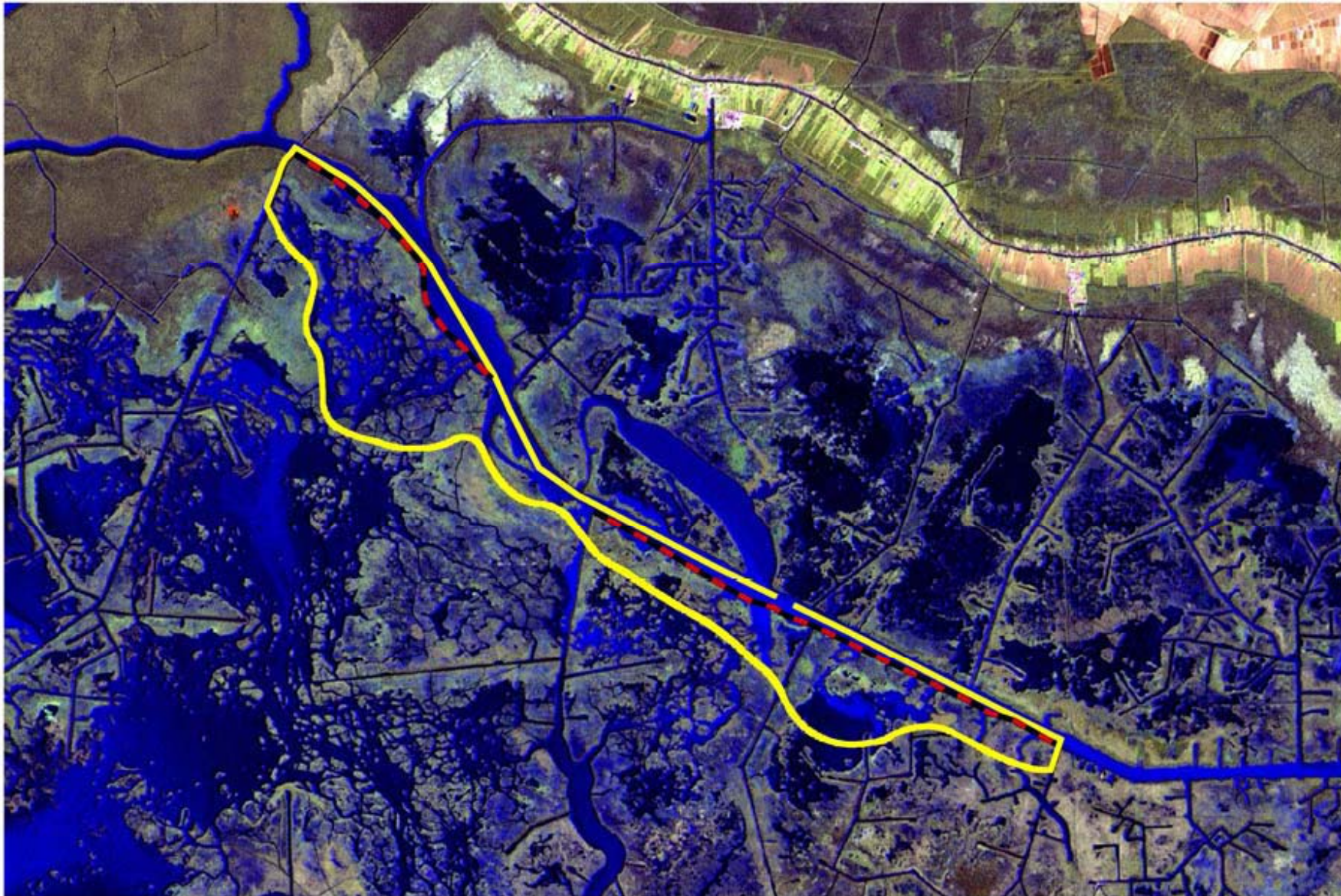
0 9 Miles



Project Vicinity







 Shoreline Protection Structure  
 TE-43 Project Area

0 1 2 3 4 Miles



Project Vicinity







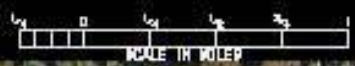
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PROJECT PLAN MAP - TE-43





















## GIWW Bankline Restoration of Critical Areas (TE-43)

	<i>Original Project</i>	<i>Current Project</i>
<i>Length of Shoreline</i>	<i>38,000 ft</i>	<i>41,000 ft</i>
<i>Phase Two Approval</i>	<i>\$17.9M</i>	<i>\$20.4M</i>
<i>WVA -- AAHUs</i>	<i>183</i>	<i>183</i>
<i>Net Acres after Year 20</i>	<i>366</i>	<i>*366</i>
<i>Prioritization Score</i>	<i>45.65</i>	<i>43.25</i>

# GIWW Bankline Restoration of Critical Areas (TE-43)

## Selected Check List Items

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# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

646 Cajundome Blvd.  
Suite 400  
Lafayette, Louisiana 70506

September 28, 2004

Colonel Peter J. Rowan, Chairman  
CWPPRA Task Force  
U.S. Army Corp of Engineers, New Orleans District  
P.O. Box 60267  
New Orleans, Louisiana 70160-0267

Dear Colonel Rowan:

The U.S. Fish and Wildlife Service (FWS) hereby requests Phase 2 construction approval for the North Lake Mechant Landbridge Restoration Project (TE-45). That project was authorized for Phase 1 funding by the Louisiana Coastal Wetlands Conservation and Restoration Task Force (Task Force) under the authority of the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) on the 10<sup>th</sup> Priority Project List.

As per the CWPPRA Standard Operating Procedures, we submitted a Phase 2, increment 1 funding request for review by the CWPPRA Technical Committee at their September 9, 2004 meeting. This project was ranked 5<sup>th</sup> for funding by vote of the Technical Committee at that meeting. Because there was insufficient funding available for our initial request, the Technical Committee requested that we review the project to determine whether the budget could be reduced without negatively affecting the project goals and objectives. The Technical Committee also deferred the funding decision for this project, and will apparently provide no recommendation to the Task Force regarding this issue.

We have been able to reduce the Phase 2, increment 1 funding request by \$4,939,081 to \$27,400,959 without compromising the integrity of the project. This was done through a combination of reducing Phase 2 administrative costs and two construction-related reductions. Those reductions do not significantly reduce project benefits, and are included in the project bid package so that they may be implemented, should the bids allow it. These changes were reviewed and approved by the CWPPRA Engineering Work Group. In addition, we are de-obligating funds from other FWS projects, as well as Phase 1 and CU1 funds from this project; thus, increasing the available construction funding for all projects in the CWPPRA program. The combination of reducing the project costs and returning unexpended funds back into the program yields a positive balance in the program, based on



the funding projections provided at the Technical Committee meeting. We have also encouraged all CWPPRA agencies to review their project budgets for available unexpended funds, particularly the Phase 1 budgets of those projects that have already requested Phase 2 construction approval.

Please find attached the original Phase 2 request, as presented to the Technical Committee on September 9, 2004, which now includes an attachment detailing the project changes we have proposed. We look forward to presenting this information at the forthcoming CWPPRA Task Force meeting for approval. Should you or your staff have any further questions, please contact Martha Segura (337/291-3110) of this office.

Sincerely,

A handwritten signature in black ink, appearing to read "Russell C. Watson", with a horizontal line extending to the right.

Russell C. Watson  
Supervisor  
Louisiana Field Office

Enclosure